4922

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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton *Director*

State: LOUISIANA

DESCRIPTIVE REPORT

Topographic
~~*Hydrographic*~~ } *Sheet No.* E 4122

LOCALITY

~~Longitude 89° 36' 45" to~~

~~Longitude 89° 41'~~

Gulf Coast

Vicinity of Big Constance Bayou

1934

W. E. Parker
CHIEF OF PARTY

U. S. GOVERNMENT PRINTING OFFICE: 1933

Applied to Chart 1051 Aug 1937 Chas. R. Bush Jr.

" " " 1277 Sept 1937. C.R.B.

Form 537a

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter "E"

REGISTER NO. 4922

State LOUISIANA

General locality GULF COAST

Locality ~~Longitude 92° 26' 45" to Longitude 92° 41'~~ Vicinity of Constance Bayou

Scale 1:20,000 Date of survey August 1933 to March 1934

Vessel U.S.C.& G.S.S. "HYDROGRAPHER

Chief of Party W. E. Parker

Surveyed by C. A. Schanck and D. H. Bassett

Inked by D. H. Bassett

Heights in feet above MHW to ground ~~to tops of trees~~

~~Contour - Approximate contour - Form line interval - - - - feet~~

Instructions dated December 17, 1932, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1928

L O U I S I A N A

Coast of Louisiana

Longitude 92° 26' 45" to 92° 41'

- 1933 -

LOCALITY AND LIMITS:

The topography of this sheet extends eastward along the Gulf Coast of Louisiana from a junction with Topographic Sheet "D" at triangulation station CON to a junction with sheet "F" at triangulation station MID. This work was done at a 1:20,000 scale and covers 14½ statute miles of shoreline. Detailed topographic features were located inshore only to the limits of the range of rod readings from a traverse along the beach.

CONTROL, METHOD AND CLOSURES:

Three triangulation stations established by the party of E. R. McCarthy in 1933 are located on the sheet, all of them along the coast line. Inshore from the coast the land is a featureless grassy marsh over which it was impossible to locate points by intersection. Therefore it was necessary to depend entirely on traverse to control the topography along the beach.

The traverse on this sheet was measured with a 100 meter wire, the length of which was checked twice daily. As explained in the report for sheet "D", this method was used to overcome errors due to heat waves and refraction. By using the wire method, the number of setups was nearly cut in half. Setups were made at intervals of 1000 meters where possible and the high water line and other details were rodded in from both directions from each setup. Rod readings on the high and low water line and marsh line were taken

at intervals of 100 meters where the lines were smooth and oftener when they were irregular.

At ⊙ ORE it was found that the orientation was wrong and the traverse was out 152 meters in azimuth. It was corrected here, The shore line from ORE to ROLLOVER swung in and the shore line from ORE to CON needed no adjustment.

The shore line from ROLLOVER to MID was done on March 29, 1934, and the traverse started at MID. This line was out 28 meters in azimuth and was too long by 32 meters. On a check of distortion and shrinkage, it was found that the sheet had shrunk 15 meters between the time of starting and finishing the traverse. This line was corrected by a simple traverse adjustment.

LAND MARKS AND GENERAL DESCRIPTION OF THE AREA.

There are no landmarks along the coast in this area. The nearest things to landmarks are the mouths of the bayous. These are not destinguishable more than about a half mile off shore at which distance the water is so shoal that they would be of interest to nothing but very small boats.

The topographic features are very similar along the entire length of the sheet. The water line is separated from the inshore marsh by a strip of sand and fine shell averaging 50 meters wide. It is evident that this sand has been washed in from some distance offshore because the strip between high and low water contains some fine sand but is mostly mud and there is a narrow strip of mud between high water and the sand indicating that the sand had been washed over the mud during storms. Inshore from the sand strip the land is marshy for miles.

COMPARISON WITH OLD SURVEY

In comparing the bromides of the old survey (Register #1688 and #1689, dated year 1886, it is found that there has been a decided change in the shore line and topographic features adjacent to the beach. From triangulation station △ CON to Rollover Bayou the beach has washed back, northward, approximately 350 meters and from Rollover Bayou to triangulation station △ MID (1933) the erosion has lessened so that the change is about 175 meters.

The old survey shows a small lake at latitude 29° 34' 45", longitude 92° 38'. The shore line has moved northward at this point so that this lake is no longer in existence. Big Constance Bayou shows a very distinctive change. The beach has moved northward so that instead of having one mouth to the Gulf, it has two and at high tide, it has three. This is entirely due to the beach washing away and not to an error in topography. The features, such as turns and junctions of the Bayou are similar to those shown on the old sheet at that particular distance back from the water. There is only water enough for very small boats at the mouths of Big Constance Bayou. The mud flat at latitude 29° 34' 30", longitude 92° 35' 30" is covered with water to a depth of approximately one foot at high tide. The lake or pond shown at the end of the easterly branch of Big Constance Bayou has been filled in apparently as it is no longer in evidence to one, from any part of the beach or any point on the bayou during the present survey.

Boggy Bayou has gone out of existence but there is a very small pond (depth 1 foot) in approximately the place where it's head used to be. This was no doubt caused by the beach washing back and

impounding water from Boggy Bayou. This pond will no doubt be filled in within a short length of time.

Some of the triangulation stations and reference marks established in 1933 have already been destroyed and the remaining ones will no doubt be lost within a few months as they are in the mud now and below the high water line. These marks were probably 25 to 35 meters inshore when established. Any effort to re-establish these marks along the sand beach is apparently a loss of time and money.

LIST OF PLANE TABLE POSITIONS

On this sheet there are no natural objects for hydrographic signals. Signals were erected along the beach. They were various types ranging from small tripods about 5 feet high to the hydrographic signals about 85 feet in height. Five topographic stations on this sheet were marked with standard marks and described on standard form 524. These stations are JAY, FLY, ICE, EYE and KEN. Twelve other stations were BUD, OX, ZEV, UTE, MO, ORE, HAM, CAL, TEX, PON, TRAY and HIP. The tall hydrographic signals near the three triangulation stations were also located by topography. It is believed that the topographic marks established along the beach will be destroyed within the next two or three years.

ADDITIONAL WORK

No additional work is recommended on this sheet.

Respectfully submitted,

D. H. Bassett

D. H. Bassett, Draftsman,
Coast and Geodetic Survey.

APPROVED;

W. E. Parker

W. E. Parker, Captain,
Coast and Geodetic Survey,
Commanding "HYDROGRAPHER".

S T A T I S T I C S

for

TOPOGRAPHIC SHEET " E "

Shore line	14½ statute miles
Bayous	2 statute miles

REVIEW OF TOPOGRAPHIC SURVEY No. 4922

Title (Par. 56) Vicinity of Big Constance Bayou, La.

Chief of Party W.E. Parker Surveyed by C.A. Shanck D.H. Bassett Inked by D.H. Bassett

Ship Hydrographer Instructions dated Dec. 17, 32 Surveyed in 1934

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) See page 2 DR-ue-O Are CKG

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)

4. ~~The amount of vertical control that the Manual specifies for contours formlines was accomplished. (Par. 18, 19, 20, 21, 22, 23.)~~

5. ~~The delineation of contours formlines is satisfactory. (Par. 49, 50.)~~

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) None furnished

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

8. The representation of low water lines, ~~reefs, coral reefs and rocks,~~ and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)

9. ~~Rocks and other~~ important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

10. The span, draw and clearance of bridges are shown. (Par. 16c.) None

11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~

12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

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Survey No. T 4922

GEOGRAPHIC NAMES

Date. April 28, 1935 LOUISIANA

Chart No. 1277 & 1278

Diagram No. 1277 & 1278

Approved by the Division of Geographic Names, Department of Interior. ✳

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	✓ Big Constance Bayou (GN No)	Constance Bayou			
	✓ Rollover Bayou	Same			
	-------	✓ Boggy Bayou (gone out of existence) see D.R.			

APPROVED NAMES UNDERLINED IN RED
C.F. McCallum

(M-136)

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control. Not discussed in the descriptive report.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) Only 2 cards submitted although the descriptive report states five were prepared.

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) Descriptive report states none exist

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) ✓

18. The geographic datum of the sheet is N.A.(1927) Adjusted and the reference station is correctly noted. (Par. 34.) ✓

19. Junctions with contemporary surveys are adequate. ✓ A comparison with T.1688-9(1886) shows a recession of the shoreline throughout the survey of 260 to 440 meters.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓ Not discussed in descriptive report.

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓

22. No additional surveying is recommended. ✓

23. The Chief of Party inspected and approved the sheet and the descriptive report ~~after review by~~ There is no record that the chief of party inspected the sheet. ✓

24. Remarks: Air photo surveys have been made of this area by the Geological Survey. They are based on good control and may be used to supplement this survey.

Reviewed in office by E. P. Ellis, February 28, 1936

Examined and approved:

E. K. Green
Chief, Section of Field Records

Fred. L. Peacock
Chief, Section of Field Work

L. O. Colbert
Chief, Division of Charts

Thurdle
Chief, Division of Hyd. and Top.

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